

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Panacron, Inc.

Kentucky Manufacturing Assistance Center

Kentucky MEP Center Helps "Heat Up" Company's Future

Client Profile:

Panacron, Inc., located in the Appalachian city of Irvin, Kentucky, is the only producer of full-size (4 x 8) gypsum board electric radiant coiling heating panels. The panels, which heat living spaces similarly to the way in which the sun heats the earth, are marketed under the name Panelectric. The company currently employs fewer than five persons.

Situation:

Radiant wall board panels are considered among the most efficient, environmentally-friendly, and comfortable methods of home heating. As such, Panacron management believes the company is well positioned for future growth as the demand and popularity for more energy-efficient heating methods increases. Holding back this demand and popularity are costs related to production space, equipment specifications, and processes not easily automated or replicated. Preliminary marketing analysis indicates that lower panel costs achieved through a more compact, replicable, and reliable manufacturing system, would help Panacron expand more quickly into new markets, either through their own production and distribution channels, or through licensing such a system worldwide. Panacron President Michael Meade met with Gary Marshall from the Kentucky Manufacturing Assistance Center (KMAC), a NIST MEP network affiliate, to enlist help in determining the costs and viability of achieving these goals.

Solution:

KMAC deliverables included a detailed feasibility study and a marketing analysis, as well as assistance in obtaining grant funds through Kentucky's Rural Innovation Fund (RIF) to help cover the cost of the study and analysis. The feasibility study's primary objective was to work with a CADD professional to help determine the potential of new machines/processes that would reduce system space and layout, plus integrate state-of-the-art processes that would result in an economically replicable system. The marketing analysis objective was to see if the more compact production system and lower-cost panels would indeed result in market expansion. The conclusion: 1) The development of new technology can significantly reduce space for production; however, it would have to be proved by prototyping at a considerably higher cost than initially targeted; and 2) Based on the projected costs of prototyping, it is unknown if the projected production volume vs. the unknown market demand would justify the capital expenditure at this time.

Results:

- * Take actions otherwise not taken.
- * Take actions more quickly and at lower cost.
- * Improved understanding of customers, markets, and competitors.

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

- * Improved business and strategic planning.
- * Increased investment in marketing and sales by \$25,000.
- * Avoided unnecessary investment of \$500,000.
- * Saved on investments of \$500,000.

Testimonial:

"KMAC provided me a very valuable roadmap for future expansion of my company. Their evaluation of my capital investment plans saved me considerable time and expenditures, while showing the important preliminary needs of market and sales development, and production capacity, to help ensure success for future investment plans. I now am better prepared to make such decisions."

Michael Meade, President